



# **FORT CAMPBELL ASBESTOS MANAGEMENT PLAN AUGUST, 2005**

**INSTALLATION ASBESTOS MANAGEMENT**

FORT CAMPBELL  
ASBESTOS MANAGEMENT PLAN

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## GLOSSARY OF ABBREVIATIONS

ACBM	Asbestos Containing Building Material (refer to definitions)
ACM	Asbestos Containing Material (refer to definitions)
AMCO	Asbestos Management Control Officer (Installation Asbestos Control Manager from the Public Works Environmental Division)
AM&M	Post Asbestos Management and Maintenance Plan
AMP	Asbestos Management Plan
AMT	Installation Asbestos Management Team
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
MAP	Model Accreditation Program (refer to definitions)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIOSH	National Institute of Occupational Safety and Health
RACM	Regulated Asbestos Containing Material

## DEFINITIONS AND TERMS

**Accredited or Accreditation:** When referring to a person or laboratory means that such person or laboratory is accredited according to section 206 of Title 11 of the Asbestos Hazard Emergency Response Act (AHERA) and the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). Delineation of this requirement is in 40 CFR 763 Subpart E. Appendix C. The State of Kentucky also has accreditation requirements outlined in 401 KAR 58:005.

**Asbestos:** A group of naturally occurring minerals that separate into fibers (includes asbestiform varieties of chrysotile; crocidolite; amosite; anthophyllite; tremolite; and actinolite).

**Asbestos-Containing Building Material (ACBM):** Means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM found in or on interior structural members or other parts of a building.

**Asbestos Program Manager:** The designated Environmental Division representative (herein designated as the Asbestos Management and Control Officer or AMCO) who supervises all aspects of the facility asbestos management and control program.

**Asbestos-containing material (ACM):** When referring to buildings, means any material or product that contains more than one percent of asbestos by weight.

**Competent Person:** One who is capable of identifying existing and predicted hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, and who is specially trained in a course which meets the criteria of 40 CFR Part 763 for supervisor.

**Damaged Friable ACM:** Means friable ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate: flaking, blistering, or crumbling of the ACM's surface; significant water damage or repeated water stains, scraps, gouges, mars or other signs of physical injury on the ACM.

**Friable ACM:** Means any ACM that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Includes previously non-friable material after it becomes damaged to the extent that it may be crumbled, pulverized, or reduced to powder by hand pressure. (Inhalation of asbestos fibers has been linked to cancer and other diseases in humans. Friable ACM presents a higher potential for release of fibers and human exposure.)

**Medical Surveillance:** A periodic comprehensive review of a worker's health status. The required elements of an acceptable medical surveillance program are listed in the OSHA standards for asbestos.

**Model Accreditation Program (MAP):** The EPA rule which clarifies the types of persons who must be accredited to work with asbestos in schools and public and commercial buildings. This rule also specifies the training requirements for asbestos abatement personnel (see 40 CFR 763).

**Non-Friable ACM:** Includes category I and category II non-friable ACM. Category I non-friable ACM includes asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM includes any material, excluding Category I non-friable ACM, containing more than 1% asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Preventive measures:** Means actions taken to reduce disturbance of ACM or otherwise eliminate the reasonable likelihood of the materials becoming damaged or significantly damaged.

**Regulated Asbestos Containing Material (RACM):** Means a friable asbestos material or non-friable ACM that has become friable or has a high probability of becoming friable by forces expected to act on the material.

**Response Action (Asbestos Abatement Response Action)** is the response action to an ACM that has been damaged (is or has become friable) and presents a risk to occupants.

This action, with few exceptions, has been removal of that material. Accomplishment of this action must be by EPA certified abatement workers. There are other actions that are possible. The operations and maintenance action is always the action until one of the response actions is required. Response action alternatives fall into five main categories:

**Encapsulation** - the use of an agent to seal the surface or penetrate the bulk of ACM, to prevent release of the fibers.

**Enclosure** - a resilient structure, built (or sprayed) around ACM designed to prevent disturbance and contain released fibers.

**Operations and Maintenance** - cleaning work practices and periodic surveillance to maintain ACM in good condition, and minimizing and controlling ACM disturbance.

**Removal** - taking out or stripping ACM from structures or substrates.

**Repair** - returning damaged ACM to an undamaged condition or to an intact state through limited replacement and patching.

Asbestos Abatement Response Actions protect human health and the environment from damaged friable ACBM.

# ASBESTOS MANAGEMENT PLAN

## 1. INTRODUCTION

**1.1. PURPOSE.** Army Regulation (AR) 200-1, “Environmental Protection and Enhancement,” outlines procedures for establishing a post asbestos management program; design of the Asbestos Management Plan (AMP) for Fort Campbell is to be consistent with this regulation. This plan is further intended to maintain a permanent record on the status and condition of all asbestos containing material (ACM) in the Fort Campbell facility inventory and to update these records on a continual basis until the ACM is removed from the inventory. The management plan provides for:

**1.1.1. Primary Documentation -** The management plan serves as the primary documentation for the cumulative results of the facility asbestos control program.

**1.1.2. Mechanism for Oversight -** The management plan provides the mechanism for oversight of the entire asbestos control program.

**1.1.3. Maintaining Credibility -** The management plan serves as a major item for maintaining the credibility of the asbestos control program.

**1.1.3.1.** The federal government agencies are all driven by one goal: to protect the health of their people, their workers, and the people they serve from unwitting exposure to asbestos. The main thrust is removal of asbestos containing materials, where possible.

**1.1.3.2.** Army policy is to manage ACM in place as long as practical, or until scheduling a facility with ACM for disposal (then the ACM must be removed). This policy requires installations to have specific procedures for managing facilities and protecting personnel from the hazards associated with damaged ACM. It is the Army’s and Fort Campbell’s intention to remove ACM when it is a potential threat to personnel health, and/or as necessary to comply with applicable regulations, and/or whenever it is opportune to do so.

**1.2. BACKGROUND.** Asbestos is a group of naturally occurring minerals. It is distinguished from other minerals by the fact that its crystalline structure separate to form long, thin fibers. Inhalation of asbestos fibers has been linked to cancer and other diseases in humans. ACM that is capable of being crumbled, pulverized, or reduced to

ACMs have been widely used in the construction trade for many years because of properties that make them strong, durable, and good insulators. These products became widely used before the health effects were fully understood. We now understand that the health effects are severe, sometimes even with relatively small exposures.

To protect society from future or ongoing exposures, and the associated risks, major efforts to control and contain, or remove deteriorating asbestos containing materials must be performed. By using proper techniques and work procedures, the risk to removal workers will be low. These efforts now will change the future of asbestos disease in our society by reducing the frequency and severity of asbestos exposure.

Appendix A includes a list of references upon which to build an asbestos program, to protect our workers and the environment.

## 2. ORGANIZATIONAL ROLES AND RESPONSIBILITIES

**2.1. GENERAL.** The AMP establishes asbestos control procedures to include identification, scheduling of abatement activities, cleanup, and disposition and monitoring of asbestos in Fort Campbell facilities. It establishes an Installation asbestos management team (AMT). It identifies responsibilities of Public Works, Installation Medical Authority (Preventive Medicine), Contracting, and others. Figure 2-1 has an illustration of the asbestos management organizational chart. Figure 2-1 represents the primary asbestos management control functions as noted in the chain of command. Figure 2-2 has an illustration of an asbestos management and control diagram. Figure 2-2 identifies how the AMT practically functions, focusing attention upon the DPW Environmental Division for Installation management and control of the program. The intent of the asbestos management and control diagram is not to represent the chain of command; the intent is to represent how the asbestos control program team members may effectively function in relation to other team members. The informal organization provided is further intended to promote communication and effective decision making within the AMT.

The AMT is advised to review this document to understand Army Policy and to implement it at the installation level. It will be necessary for the AMT to keep abreast of regulatory developments through its review of any changes in Title 29 Code of Federal Regulations (CFR) (Department of Labor), Title 40 CFR (Protection of Environment), and Title 49 CFR (Department of Transportation). AMT members attending annual asbestos awareness training classes provided through the Environmental Division is an excellent way to keep current with the new regulations.

The AMP goals and policies are provided in AR 200-1 and this plan. The AMP will be executed by the AMT.

## **2.2. RESPONSIBILITIES:**

### **2.2.1. Garrison Commander will:**

2.2.1.1. Establish and execute an Asbestos Management Plan in support of DA and IMA asbestos management policies.

2.2.1.2. Program and budget adequate resources to execute an effective asbestos management program.

2.2.2. The **Director of Public Works**. The Director of Public Works, under the direction of the garrison commander, will:

2.2.2.1. Establish an Installation Asbestos Management Team and appoint an Asbestos Management and Control Officer (or team leader, from the DPW Environmental Division). This team will, as a minimum, consist of representatives from:

- a. DPW Environmental Division.
- b. Other Applicable DPW Divisions/Branches.
- c. Preventive Medicine Service.
- d. Directorate of Contracting (DOC).
- e. Defense Reutilization and Marketing Office (DRMO).
- f. Command Safety Office.
- g. Staff Judge Advocate (SJA).
- h. Public Affairs Office (PAO).
- i. Fort Campbell School System.
- j. Community Activities Business Center (CABC).

2.2.2.2. Use the Installation Asbestos Management Team to prepare, coordinate, and execute this Installation AMP.

2.2.2.3. Ensure projects are reviewed for the presence of asbestos.

2.2.3. The [Environmental Division \(DPW\)](#) will:

2.2.3.1. Assign an installation Asbestos Management and Control Officer (AMCO). The AMCO will act as chairman and arbitrator for the Installation AMT. The AMCO has overall responsibility for development and implementation of all aspects of the asbestos management program.

2.2.3.2. Program and budget for personnel training and contractor support services.

2.2.3.3. Perform periodic review of In-House Asbestos Abatement Team training for proper asbestos handling and abatement courses.

2.2.3.4. Provide asbestos awareness training to Unit Environmental Quality Officers and Unit personnel as required. Also provide asbestos awareness training to DPW Maintenance Division and other applicable staff.

2.2.3.5. Promote general public education and awareness of asbestos management, health, and safety.

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2.2.3.6. Conduct periodic inspections of both the In-House Asbestos Abatement Team and contract asbestos abatement techniques.

a. AMCO has the authority to make changes to or suspend operations of the In-House Asbestos Abatement Team.

b. AMCO also provides comments for the DPW Engineering Contract Management Branch or the DOC on possible action concerning contractor operations.

2.2.3.7. The AMCO will be given the opportunity to review all asbestos related work plans and specifications generated by the DPW Engineer Design Branch and Maintenance Division to ensure work practices specified in Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 and Environmental Protection Agency (EPA) 40 CFR 61 Part M are adequately addressed and as may be necessary to reduce exposure to a minimum.

2.2.3.8. Prepare and maintain an adequate disposal permit for an approved landfill site.

2.2.3.9. Develop and maintain an installation AMP to be revised every 3 years.

2.2.3.10. Develop and maintain an installation Operations and Maintenance Plan, herein referred to as Asbestos Management and Maintenance Plan (AM&M Plan).

2.2.3.11. Provide technical consulting services to the Fort Campbell staff involved in asbestos activities.

2.2.3.12. Serve as the liaison office between Fort Campbell and all regulatory agencies except Department of Labor (OSHA) (Installation Safety responsibility) for asbestos activities.

2.2.3.13. Support In-House Asbestos Abatement Team by:

a. Forwarding NESHAP notification to State regulatory agencies, as appropriate, in a timely manner.

b. Providing Industrial Hygiene Services for abatement projects.

2.2.3.14. Ensure surveys of facilities are accomplished for the presence of asbestos by providing for the maintenance / update of the asbestos database. The Environmental Division will compile and maintain asbestos related information in a user friendly, readily assessable format. Maintain the following items:

a. Present written database (set of books) and computerized database (ADAM database and CADD drawings).

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b. Record of all events and activities relating to or affecting ACM in Fort Campbell facilities.

2.2.3.15. Initiate formal requests to have all damaged ACM repaired or removed. Requests will communicate the need for immediate remedial action where health hazards are identified due to asbestos exposure. The facility survey recommendations shall be a

focal point for this initiative. Damaged friable ACM will be given first abatement priority.

2.2.3.16. Ensure proper care of asbestos records be given as noted in Chapter 5.

2.2.4. The **Engineering Division (EngD) (DPW)** will:

2.2.4.1. **Through the Engineer Design Branch:**

a. The Chief, Engineer Design Branch, will ensure design contracts address the presence of asbestos and stipulate the requirement to comply with all OSHA, EPA and state asbestos control regulations. In addition, specify non-ACBM in contract projects where asbestos-free buildings material substitutes exist. Also as practical, specify that the contractor provide written statement that no ACMs were used in the construction project. As specified in AR 420-70, Chapter 3, Paragraph 3-7.e., U.S. Army Corps of Engineers Guide Specifications (joint effort with Naval Facilities Engineering Command) UFGS-13280A and 13281N will be used in the preparation of asbestos abatement specifications. Give the AMCO (DPW Environmental Division) the opportunity to review asbestos related specifications generated by the Engineer Design Branch to ensure work practices specified in OSHA 29 CFR 1926.1101 and EPA 40 CFR 61 Part M are adequately addressed and as may be necessary to reduce exposure below permissible exposure limits.

b. Maintain a copy of the written asbestos database (1 set of books).

c. Request an assessment from the Environmental Division of suspected material or reference asbestos database if there is a possible presence of asbestos that could reasonably result in exposure to asbestos fibers. Should the request be made about a suspected health hazard, forward the assessment to the Preventive Medicine Service to make the appropriate recommendations.

d. Ensure, if determined that asbestos is present and could cause contamination, the In-House Asbestos Abatement Team or asbestos removal Requirements Contractor removes or otherwise abates all asbestos before performance of other work.

e. Provide performance evaluation to Directorate of Contracting (DOC) for future use in making responsibility determinations. Input on previous performance is critical and must be documented. Conduct reviews of asbestos abatement contracts to ensure regulatory compliance.

f. Ensure that preparation of all contract abatement plans are done by accredited personnel meeting the AHERA/ASHARA “abatement project designer” training requirements. (If the project is in Kentucky, the designer must also be state accredited.)

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g. Develop and use for planning and programming purposes an Asbestos Removal Plan.

(1) Develop a proactive prioritized list of asbestos removal and abatement projects. The basis of this prioritized list, in priority order, shall be:

- (a) Survey hazard assessments and recommendations,
- (b) Friable ACM, and
- (c) then upon a logically drawn prioritized list of abatement actions considering the criticality, age, and use of the facility. Determine short and long term installation plans that may impact existing structures. That is, identify those buildings that are to be renovated or demolished. Anticipated plans for the building and its use are factors to consider when prioritizing an abatement list.

(2) Use it to select and validate projects that warrant dedicated action to remove asbestos and submit for In-House Asbestos Abatement Team or Asbestos Abatement Requirements Contractor accomplishment.

(3) Update the Asbestos Removal Plan to document the actual removal of asbestos materials from the inventory. Maintain updated information in a permanent record to document progress.

#### 2.2.4.2 Through the **Contract Management Branch:**

- a. Ensure contractors adhere to OSHA's Construction Standard for Asbestos (29 CFR 1926.1101) and EPA's National Emission Standards for Asbestos (40 CFR 61 Part M) during the removal and disposal of ACM in facilities scheduled for renovation and disposal. Immediately report discrepancies, deficiencies or lack of performance to the Contracting Officer and the Environmental Division.

- b. Provide performance evaluation to DOC for future use in making responsibility determinations. Input on previous performance is critical and must be documented. Conduct reviews of asbestos abatement contracts to ensure regulatory compliance.

- c. Quality assurance inspectors will familiarize themselves with all applicable asbestos regulations. In addition, conduct site inspections to adequately ensure contract and regulatory compliance. Inspection procedures for projects containing asbestos will specifically emphasize OSHA/EPA/State asbestos precautions. Obtain the EPA certification "Asbestos Abatement Supervisors" training course for the asbestos abatement contract inspector. Ensure contractors adhere to OSHA's Construction Standard for Asbestos (29 CFR 1926.1101) and EPA's National Emission Standards for Asbestos (40 CFR 61 Part M) during the removal and disposal of ACM in facilities scheduled for renovation and disposal. Immediately report discrepancies, deficiencies, or lack of performance to the Contracting Officer and the Environmental Division.

- d. Asbestos transported to the Fort Campbell Construction / Demolition Landfill must be accomplished by appointment / coordination through the Landfill Operator. Twenty-four hour notice is required. A landfill card, also required, is obtained from the Environmental Division, Pollution Prevention Branch. This would apply to either a government or contractor operation. Under a contract, the Landfill Operator would still be responsible for coordination/appointments and not the Contracting Officers

Representative (COR). Those who deliver must have a respirator and proof of fit testing. The vehicle must also be properly placarded. Further, the container must be carefully handled. The landfill operator shall ensure that all asbestos brought to the landfill for disposal is accompanied by an asbestos waste manifest and copy of the State NESHAP notification. The landfill operator shall keep records of the amounts and dates of disposal of all asbestos received at the landfill facility. Additional guidance is in “Asbestos Disposal Policy,” which is available from the Environmental Division.

2.2.5. The **Chief, Maintenance Division (DPW)** will:

2.2.5.1. Conduct maintenance for all installation buildings that considers the presence of ACM.

2.2.5.2. Ensure proper training and health monitoring of all new Maintenance Division personnel as they become involved in the Asbestos Control Program. Obtain, through the DPW Environmental Division, required annual OSHA asbestos awareness training for all craftsman and landfill operators.

2.2.5.3. Ensure that all employees working with asbestos receive a physical examination before employment, annually during employment, and at termination of employment, as required by TB MED 513, “Occupational and Environmental Health Guidelines for the Evaluation and Control of Asbestos Exposure.” Maintain records on training and health monitoring of personnel involved in the Asbestos Control Program.

2.2.5.4. Through the Supply function exclude asbestos from all procurements and uses where asbestos-free buildings material substitutes exist.

2.2.5.5. In conjunction with the Environmental Division, develop and maintain a Post AM&M Plan.

2.2.5.6. Ensure that all Maintenance Division personnel, except in specific emergency situations, when encountering unscheduled asbestos on projects, immediately report this through their immediate supervisor to the Work Management Branch for proper rescheduling.

2.2.5.7. Asbestos transported to the Fort Campbell Construction/Demolition Landfill must be accomplished by appointment/coordination through the Landfill Operator.

Twenty-four hour notice is required. A landfill card, also required, is obtained from the Environmental Division, Pollution Prevention Branch. This would apply to either a Government or Contractor operation. Under a contract, the Landfill Operator would still be responsible for coordination/appointments and not the COR. Those who deliver must have a respirator and proof of fit testing. The vehicle must also be properly placarded. Further, the container must be carefully handled. The landfill operator shall ensure that all asbestos brought to the landfill for disposal is accompanied by an asbestos waste

manifest and copy of the State NESHAP notification. The landfill operator shall keep records of the amounts and dates of disposal of all asbestos received at the landfill facility. Additional guidance is in “Asbestos Disposal Policy,” which is available from the Environmental Division.

2.2.5.8. Through the Chief, Work Management Branch, ensure that asbestos procedures are integrated into work reception; assignment scheduling; and estimating activities, to include increased labor and job hours due to asbestos handling procedures for these tasks. Review all construction-related work requests, to include Self-Help work, for potential asbestos exposure or impact. Request an assessment of suspected material or reference asbestos database if there is a possible presence of asbestos that could reasonably result in exposure to asbestos fibers. Review asbestos assessment results before requesting assessments to avoid duplicate surveys.

2.2.5.9. Through the Chief, Work Management Branch, monitor the facility inventory. They will use the asbestos database to maintain approval documents (DA Form 4283, etc.) of all maintenance and construction activities that involve any form of asbestos abatement action or disturbance. Additionally, the Branch will develop the mechanism to receive inputs from all activities conducted under the directives of the Post Asbestos Program.

2.2.5.10. Establish, maintain, and supervise the In-House Asbestos Abatement Team. This small, in-house capability using properly equipped, trained, and certified civilian personnel is to accomplish emergency projects or small projects not cost effective to contract. Through the team supervisor:

- a. Provide required equipment and supplies for personnel protection and abatement operations.
- b. Maintain copies of OSHA Standards 29 CFR 1910.1001 and 1926.1101, and EPA 560/5-85-024 (“Purple Book”). Use appropriate respirators and proper protective equipment, as required by OSHA 29 CFR 1926.1101, 1910.134, and 1910.1001, during all in-house asbestos abatement activities. Properly use and maintain personal protective equipment (respiratory devices, clothing, head protection, and all other applicable appropriate gear). Follow procedures outlined in the Purple Booklet, “Guidance for Controlling Asbestos Containing Materials in Buildings.”

- c. Perform air monitoring for each abatement operation. Monitoring shall be accomplished before (to establish base line), during, and after (to meet clean standard of 0.01 fibers per cubic centimeter) all abatement activities, whether it be removal, encapsulation, or enclosure unless historical objective data proves the work practices to be used pose no reasonable threat of asbestos exposure. It is the asbestos abatement team’s responsibility to coordinate this effort.

- d. Forward all National Emissions Standards for Hazardous Air Pollutants (NESHAP) notifications to the Environmental Division in sufficient time to meet

regulatory reporting requirements. Also notify the Environmental Division a minimum of 24 to 72 hours before any long-term job is begun.

- e. Submit and coordinate work-plans with the AMCO for review and approval, and to ensure work practices specified in OSHA 29 CFR 1926.1101 and EPA 40 CFR 61 Part M are adequately addressed and as may be necessary to reduce exposure below permissible exposure limits.

- f. Ensure all asbestos abatement team members are adequately trained in asbestos treatment, abatement, handling, and control. Train asbestos abatement team supervisor to the level of a “competent person” as defined in OSHA 29 CFR 1926.1101 and Kentucky State Regulation 401 KAR 58:040, Section 10. Train additional competent persons or certified supervisors as necessary. Obtain, through the Environmental Division, required annual refresher training.

- g. Be the point of contact for all in-house asbestos abatement responsibilities.

- h. Ensure all in-house asbestos cleanups are complete.

- i. Dispose of in-house generated asbestos properly (double bagged and labeled) and send to an approved landfill with proper manifests.

- j. Maintain a daily roster of personnel entering an in-house regulated area.

2.2.5.11. Through the Roads and Grounds Branch, supervise the branches’ landfill operators.

- a. Provide required equipment and supplies for personnel protection and disposal operations.

- b. Use appropriate respirators and proper protective equipment, as required by OSHA 29 CFR 1926.1101, 1910.134, and 1910.1001, during all dumping and covering of ACMs.

- c. Ensure asbestos-containing waste is covered immediately after dumping with a minimum twelve inches of soil.

- d. Maintain copies of landfill waste manifests, NESHAP notifications, and maps showing the locations of disposals. Forward these documents each month to Environmental Division in sufficient time to meet state reporting requirements.

## 2.2.6. The [Housing Division \(DPW\)](#):

2.2.6.1. Housing on Fort Campbell has been contracted out and LBP survey and abatement regulatory compliance is now the responsibility of the contractor. That is why this section does not address many of Housing’s responsibilities for compliance. Nevertheless, realizing that a partnership exists between the contractor and the installation, the installation stands ready to provide support as required.

2.2.6.2. Housing asbestos containing waste transported to the Fort Campbell Construction/Demolition Landfill must be accomplished by appointment/coordination through the Landfill Operator. Twenty-four hour notice is required. A landfill card, also required, is obtained from the DPW Environmental Division, Pollution Prevention Branch. The Landfill Operator would be responsible for coordination / appointments and not the COR. Those who deliver must have a respirator and proof of fit testing. The vehicle must also be properly placarded. Further, the container must be carefully handled. The landfill operator shall ensure that all asbestos brought to the landfill for disposal is accompanied by an asbestos waste manifest and copy of the State NESHAP notification. The landfill operator shall keep records of the amounts and dates of disposal of all asbestos received at the landfill facility. Additional guidance is in "Asbestos Disposal Policy," which is available from the Environmental Division.

2.2.7. The [Installation Medical Authority \(Preventive Medicine\)](#) will:

2.2.7.1. **Through Occupational Health:**

- a. Perform physical examinations before placement, annually during employment, and at the termination of employment for DA employees working with asbestos and those requiring the use of respirators, as required by TB MED 513 (Occupational and Environmental Health Guidelines for the Evaluation and Control of Asbestos Exposure) and according to OSHA guidelines.
- b. Maintain health records of all employees and former employees involved in working with asbestos, as required by AR 40-5 and AR 40-66. Give proper care of asbestos records.
- c. Implement the respiratory protection program. Fit-test all In-House Asbestos Abatement Team members and other maintenance workers and Environmental staff as required. Make recommendations on respirator selection. Respirator Protection Manager must determine brand, model, and size of respirator at time of fit testing. Teach proper use of respiratory protection. In-House Asbestos Abatement Team personnel will be fit-tested with the same brand and model to be used. Ensure personal protective equipment and clothing (including respirators) provided to workers are in accordance with AR 385-10, 29 CFR 1910.1001, 29 CFR 1926.1101, and TB MED 502 (Occupational and Environmental Health Respiratory Protection Program).

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- d. Program and budget available resources to accomplish asbestos medical support responsibilities.

2.2.7.2. **Through Industrial Hygiene:**

- a. Provide guidance, assistance, and recommendations to DPW in the areas of asbestos surveys, sampling, exposure control, and risk assessment according to responsibilities described in TB MED 513 (Occupational and Environmental Health Guidelines for the Evaluation and Control of Asbestos Exposure). Provide expertise in

compliance matters associated with asbestos health-related federal, state, and local requirements.

b. The Installation Medical Authority performs workplace sampling and analysis as needed to identify and mitigate any asbestos exposure to the federal workers or facility occupants IAW policies outlined in DoD Instruction 6055.1, DoD Occupational Safety and Health Program, 1998.

c. Perform workplace sampling and analysis for federal employees, as prescribed by OSHA, where asbestos is used in recurring industrial operations. Inform individuals occupationally exposed to asbestos of the exposure and of the hazard associated with that exposure, according to 29 CFR 1910.1200, 29 CFR 1910.1001, and 29 CFR 1926.1101.

d. Provide technical assistance on personal protective equipment, including respirators, required for federal personnel involved in asbestos maintenance, repair, and abatement actions. Ensure personal protective equipment and clothing (including respirators) provided to workers are in accordance with AR 385-10, 29 CFR 1910.1001, 29 CFR 1926.1101, and TB MED 502 (Occupational and Environmental Health Respiratory Protection Program). Provide technical assistance for government controls of contractor industrial asbestos related operations.

e. Monitor asbestos abatement contracts in MEDDAC facilities.

f. Program and budget available resources to accomplish asbestos medical support responsibilities.

#### 2.2.8. The Fort Campbell [Directorate of Contracting \(DOC\)](#) will:

2.2.8.1. Provide contractual support in procurement of contracted services for surveying and abatement of asbestos.

2.2.8.2. Provide adequate enforcement of asbestos contracts. Make decisions on contract disputes. Ensure contractors adhere to the contract specifications. Give special consideration to the EPA's National Emission Standards for Asbestos (40 CFR 61, Subpart M) during the removal and disposal of ACM in facilities scheduled for renovation and disposal.

2.2.8.3. Forward all contractor NESHAP notifications to the Environmental Division for review, inspection, and record keeping.

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2.2.8.4. Coordinate with the DPW Environmental Division and Engineering Contract Management / Engineer Design Branches on any problems concerning asbestos contracts.

2.2.8.5. Exclude asbestos from all DA procurements and uses where asbestos-free substitutes exist.

2.2.8.6. Ensure contractors adhere to the notification requirements as noted in Chapter 3.

2.2.8.7. Ensure contractors, to include janitorial and maintenance type services, meet OSHA asbestos awareness training requirements.

2.2.9. The [Defense Reutilization and Marketing Office \(DRMO\)](#). DRMO will dispose of non-contract generated ACM in accordance with DOD 4160.21-M (the Defense Reutilization and Marketing Manual).

2.2.10. The [Staff Judge Advocate \(SJA\)](#) is responsible for reviewing all activities involving asbestos, when presented for review, to ensure regulatory compliance and advice on legal conflicts. The SJA is to be consulted on any liability or regulatory compliance issues relating to the asbestos abatement project. The environmental legal advisor will provide guidance, as required, for interpreting federal, state, and local laws and regulations. The environmental legal advisor will coordinate on the following when presented for coordination:

2.2.10.1. Proposed installation actions for compliance with 29 and 40 CFR series requirements.

2.2.10.2. Applications for any permits or licenses required for disposing of asbestos.

2.2.10.3. All plans and programs that have been developed to meet environmental protection laws.

2.2.10.4. Criteria, standards, performance specifications, and compliance schedules developed to ensure compliance with applicable laws regarding asbestos.

2.2.10.5. All requests for monitoring data by federal, state, and local environmental agencies to determine whether the data is required by applicable law or regulation.

2.2.10.6. All inspections by federal, state, and local regulatory agencies and the results of these inspections.

2.2.10.7. Any Notice of Violation served upon the installation for violations of federal, state, or local law.

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2.2.10.8. All known or suspected hazardous exposure to asbestos.

2.2.11. The [Command Safety Office](#) will:

2.2.11.1. Remain current on asbestos abatement activities and safety precautions, procedures, and policies as pertaining to Code of Federal Regulations, 29 CFR 1910.1001 and 29 CFR 1926.1101.

2.2.11.2. Receive and investigate asbestos-related employee complaints of unsafe working conditions. Safety personnel will refer any known or suspected asbestos-related

problem detected during safety inspections or observation to the DPW Environmental Division.

2.2.11.3. Attend Asbestos Management Team (AMT) meetings.

2.2.12. The [Public Affairs Office \(PAO\)](#) is responsible for interfacing with the media and general public concerning any asbestos-related incident. Additionally, the Public Affairs Office is responsible for disseminating information, as forwarded by DPW Environmental or any other Installation AMT member, on asbestos to Post personnel. This office will work with the AMCO to develop timely and appropriate articles on the Post asbestos program.

2.2.13. The [Fort Campbell School System](#) is responsible for compliance with AHERA regulations found in 40 CFR 763 Subpart E. They will:

2.2.13.1. Maintain Asbestos Management Plans for each school identifying the location of ACM.

2.2.13.2. Accomplish periodic reinspections of asbestos containing building material (ACBM) and take abatement response actions as necessary. Appendix B contains a list of the schools on the Post and their survey status.

2.2.13.3. Obtain required annual OSHA asbestos awareness training for all custodial and maintenance workers.

2.2.14. The [Community Activities Business Center \(CABC\)](#) is responsible for attending AMT meetings, to keep abreast of asbestos issues, and to provide input as necessary.

### 3. NOTIFICATION

#### 3.1. NESHAP (STATE) NOTIFICATION REQUIREMENTS.

Federal Regulations 40 CFR 61 requires that the EPA or authorized state agencies be notified of asbestos removal projects. In Kentucky, enforcement of this provision has been delegated to the Kentucky Department for Environmental Protection, Division of Air Quality; in Tennessee, it's the Tennessee Division of Air Pollution Control. Both state agencies also promulgated regulations to implement their state's Asbestos Control Program. These regulations require that Kentucky be notified before any asbestos project (exceptions: non-friable renovations, emergency renovations, and ordered demolitions)

according to their regulation, 401 KAR 58:025. Notify Tennessee in advance when any regulated ACM is removed; this is according to chapter 1200-3-11 of their Hazardous Air Contaminants Amendment. Notifications for both states will include the type of work and amount of ACM to be removed. Appendix C of this plan has a detailed explanation of Kentucky and Tennessee National Emissions Standards for Hazardous Air Pollutants (NESHAP) reporting requirements. (Appendix C is not meant as a substitute for the context of the 40 CFR Part 61 notifications. Fully coordinated with the State of Kentucky and Tennessee regulators, it is hoped that it will lend some clarity. Notifications will be accomplished consistent with 40 CFR Part 61.)

3.1.1. Use the following procedures for notification to the appropriate state agency.

3.1.1.1. Any supervisor or worker who becomes aware of the need for asbestos removal will immediately notify the DPW / Maintenance Division / Work Management Branch. The Work Management Branch will notify the Engineer Design Branch if the abatement is to be accomplished by contract. If the work is to be accomplished in-house, the Work Management Branch will contact the In-House Asbestos Abatement Team Chief, who will accomplish a NESHAP notification or perform the work under the long-term NESHAP notice.

3.1.1.2. The DPW Environmental Division will make timely written notification to the appropriate state agency. If necessary, the DPW / Maintenance Division / In-House Asbestos Abatement Team will also make telephonic notification.

3.1.1.3. No military member, civilian member, or contractor shall allow asbestos removal work to begin until the minimum notification period has elapsed. For contract work, DOC will ensure compliance.

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3.1.2. Contractors (if abatement being performed by contract) or the government (if abatement being performed by the In-House Asbestos Abatement Team) are required to provide a copy of State notifications to the Tennessee Division of Solid Waste Management for disposal in Ft. Campbell's landfill. In addition, contractors or the government shall provide a copy of the State notification to the Landfill Operator along with the manifest at time of disposal.

3.1.3. Contractors (if abatement being performed by contract) shall provide the government with a copy of the NESHAP notice(s). The government representative will ensure that the DPW Environmental Division also receives a copy.

**3.2. IN-HOUSE NOTIFICATION PROCEDURES.** The DPW Maintenance Division is responsible for ensuring the Environmental Division receives

NESHAP forms on in-house projects and in adequate advanced time to meet regulatory notification requirements. For emergency removal actions, the In-House Asbestos Abatement Team Chief will immediately contact the appropriate state representative giving telephonic notification; formal written notification must follow.

**3.3. INFORMATION DISSEMINATION.** The release of asbestos fibers could potentially affect all personnel who use installation facilities containing ACM. Therefore, the general base population needs to have a good understanding of the potential asbestos health hazards. A good understanding involves having accurate information, so people neither underestimate nor overestimate the health risk. The AMCO or other Installation AMT members may write articles for the post newspaper periodically or another information dissemination avenue to educate personnel. Topics may include facilities' surveys, announcement of major asbestos removal projects, or warnings to personnel to avoid a controlled area where construction activities involve asbestos abatement. In addition, articles may provide basic information about asbestos and applicable regulations.

## **4. TRAINING**

**4.1. TRAINING REQUIREMENTS.** Anyone responsible for managing, planning, designing, inspecting, treating, removing, or supervising the treatment or removal of ACM, as well as maintenance and custodial workers, require training. The DPW Environmental Division AMCO will identify appropriate training courses for each person conducting asbestos-related work. In addition, the Environmental Division shall provide awareness training to personnel who have a role in asbestos management and do not require formal EPA-approved training. However, it is the supervisor's responsibility to ensure personnel receive training. Consult the Environmental Division Education Representative for the availability of on-site and off-site training sources for these courses.

## 4.2. ASBESTOS MANAGEMENT TEAM TRAINING

**REQUIREMENTS.** For the Asbestos Management Team to prepare, coordinate, and execute the AMP, it is necessary that those team members actively involved in the technical aspects of the plan be appropriately trained. It is essential that Fort Campbell have enough trained personnel to accomplish the work anticipated in the AMP. All who conduct surveys, designers, and personnel associated with asbestos abatement will be trained in one or more of the following subjects: building inspection; project designer; and asbestos abatement procedures and practices for workers and supervisors, to meet federal, state, and local requirements. Selection and training of personnel shall be completed before anticipated projects. Table 4-1 lists those needing training and the required and recommended training each needs.

The Model Accreditation Program (MAP), 40 CFR 763, Appendix C to Subpart E, was established as part of the AHERA program establishing minimum training standards for those dealing with ACM in schools. The authority of this plan was extended under ASHARA, effective November 1992, to include publicly and privately owned commercial buildings. The EPA has mandated 5 types of certification courses. Each certification requires annual updates to keep them current. The State of Kentucky also requires a one-half day orientation course in Frankfort, Kentucky for asbestos abatement supervisors (competent workers). It is Post policy, and generally a regulatory requirement that all abatement actions be carried out by EPA "Accredited" Asbestos Abatement Supervisors and Workers. Five types of EPA certification courses are available:

4.2.1. Building Inspector. Individuals conducting building inspections (or surveys) must complete a 3-day course to obtain certification. Certified inspectors are permitted to conduct ACM inspections, collect bulk samples, and perform assessments of the ACM.

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4.2.2. Management Planner (Applies to Schools Only). This certification requires a 2-day course. Management Planners develop abatement response actions and priorities based upon inspection data.

4.2.3. Asbestos Abatement Worker. Worker training requires four days. This person may not supervise abatement projects involving regulated ACM.

4.2.4. Asbestos Abatement Supervisor. Supervisor training requires five days. This person acts as the abatement supervisor.

4.2.5. Project Designer. Designer training requires four days. A specific course has been developed for the project designer; however, this person must have the "abatement supervisor" training course first. This certification will permit the project designer to develop drawings and specifications for asbestos abatement projects.

The state of Kentucky has also mandated that those who perform these five tasks also be state accredited. The Kentucky Asbestos Accreditation Program, 401 KAR 58:005, dated 7 July 1998, is based on the EPA's asbestos MAP.

#### 4.3. TRAINING OF CUSTODIANS AND MAINTENANCE

**WORKERS.** It is essential that all custodial and maintenance staff be well informed about the asbestos problem to achieve a successful maintenance program. The minimum requirement is for 2 hours of training (Class IV work per the OSHA Construction Standard, 29 CFR 1926.1101). The strategy for worker protection is based on the fact that the worker is dealing with an ACM rather than on the possibility that the permissible exposure limit is exceeded. This training requires that all members of maintenance and custodial staff who may work in a building that contains an ACBM be trained within 60 days after commencement of employment and annually thereafter. Per OSHA and EPA, this training is required to cover certain topics. Specification writers shall specify this requirement, as necessary, in contract specifications. It is the responsibility of supervisors, with the encouragement of all the AMT, to ensure that janitorial and maintenance contractors meet OSHA asbestos awareness training requirements. Training must remain in effect until all installation ACM is removed.

**4.4. ENVIRONMENTAL QUALITY OFFICERS.** The effectiveness of an O&M program is also dependent on the awareness of building occupants. Training of Environmental Quality Officers is the primary avenue to achieve this. Advertising is also an awareness avenue. Development of Guidance and Instructions for the Post population has also been written and are available in the Environmental Handbook.

**Table 4-1. Regulatory Required/Recommended Training for Fort Campbell Personnel Engaged in Asbestos Management, Inspection, or Abatement**

<b>Title</b>	<b>Minimum Level of Training</b>
Asbestos Management Control Officer	<u>Required:</u> Supervisor/contractor, project designer, State of Kentucky Orientation Course <u>Recommended:</u> Building inspector, management planner
Industrial Hygiene (PREVMED)	<u>Recommended:</u> NIOSH 582, Supervisor/contractor
Installation government asbestos abatement inspectors (Contract Management Branch)	<u>Required:</u> Supervisor/contractor <u>Recommended:</u> Building inspector
Asbestos Survey Inspector	<u>Required:</u> Building inspector
Customer Support representatives who deal with asbestos impacted work orders	<u>Recommended:</u> Asbestos Awareness Training

Safety Office representative	<u>Recommended:</u> Asbestos Awareness Training
Public Affairs Office representative	<u>Recommended:</u> Asbestos Awareness Training
Government and Contract Maintenance workers (electricians, plumbers, and heating, ventilation specialists, etc.)	<u>Required:</u> Asbestos Awareness Training
Custodial staff (Post hospital, school system, contractors)	<u>Required:</u> Asbestos Awareness Training
Landfill Operators	<u>Required:</u> Asbestos Awareness Training
Asbestos Waste Haulers	<u>Required:</u> Hazardous Materials Endorsement on Commercial Driver's License (49 CFR 177,800 and 177.816) <u>Recommended:</u> Asbestos Worker
Asbestos Abatement Contractors	<u>Required:</u> Supervisor/contractor, Abatement worker
In-House Asbestos Abatement Team	<u>Required:</u> State of Kentucky Abatement Orientation Course, supervisor/contractor, project designer <u>Recommended:</u> Building inspector
Engineer Design Branch designers who would design asbestos response actions	<u>Required:</u> Supervisor/contractor, project designer
Environmental Quality Officers	<u>Required:</u> Environmental Quality Officer's Course

## 5. RECORDKEEPING

**5.1. PURPOSE.** The proper management of the asbestos program will require that strict discipline be directed towards the generation and maintenance of records. Proper care of records will provide the documentation of a well-managed program and compliance with Army, local, state, and federal regulations.

### 5.2. TYPES OF RECORDS.

5.2.1. The DPW Environmental Division will maintain NESHAP notifications to the Kentucky Department for Environmental Protection / Division of Air Quality and the Tennessee Division of Air Pollution Control, correspondence with state and federal regulators, inspections, waste manifest reports, and survey results.

5.2.2. The DPW Maintenance Division must maintain all records specified in the AM&M Plan. The Maintenance Division In-House Asbestos Abatement Team Chief will receive and maintain one copy of the Asbestos Air Monitoring Report (as well as the DPW Environmental Division) and will file these reports along with other records for all asbestos projects, and logs.

5.2.3. The DPW Engineering Division will maintain individual building asbestos survey/assessment records (annotated blue prints, appropriate sampling results, etc.) and other pertinent building records. The Contract Management Branch must maintain all records related to contractor performance and oversight required for regulatory compliance and deliverables specified in the scope of work. Contract Management will maintain asbestos abatement records upon project completion. The contractor performing the database update may consult, as needed, their facility records.

5.2.4. The Installation Medical Authority/Preventive Medicine maintains medical surveillance records as required by Army policy. Preventive Medicine further maintains records on respiratory protection and fit testing for the In-House Asbestos Abatement Team personnel and other government personnel.

**5.3. RECORD RETENTION.** The Army will preserve exposure monitoring results for a minimum of 30 years after the last incident of employee exposure to asbestos, medical surveillance records for the duration of employee employment plus 30 years, and training records 1 year after employment stops. All records listed here and in paragraph 5.2. must be maintained in a manner that will allow quick access.

## **6. QUALITY CONTROL AND QUALITY ASSURANCE**

**6.1. QUALITY CONTROL (QC).** Implement control of work activities and maintain throughout the life of projects to meet federal and state regulatory requirements while minimizing asbestos exposure to all personnel. QC activities are the responsibility of all AMT members. The In-House Asbestos Abatement Team Chief, the AMCO, the Engineering / Contract Management Branch representative are the primary QC monitors on site and will ensure that asbestos activities are being carried out as provided in the AM&M plan and statutory regulations.

**6.2. QUALITY ASSURANCE (QA).** The structure of the QA program is to ensure quality will be visible at all organizational levels and that QA will receive management attention. Everyone involved in the management of asbestos has a distinct role in the QA program.

## 7. INSTALLATION ASSESSMENT

**7.1. PURPOSE.** To control asbestos and to minimize environmental release and subsequent occupational and incidental exposure, one of the main objectives of Army Regulation 200-1, and the AMP, is to perform installation-wide surveys of all structures to establish and maintain an inventory of all asbestos and for the potential of exposure to individuals. Surveys are to identify the existence, extent, and condition of all ACM, along with a risk assessment of each location containing asbestos. Appendix D shows the asbestos survey status of Post OMA buildings.

**7.2. Installation Assessment will include the following:**

**7.2.1.** A complete review of maintenance schedules, design plans, and specifications to identify structures scheduled for repair, alteration, or demolition to aid in assessment prioritizing.

7.2.2. An installation-wide survey of all structures to determine the presence, location, extent, and condition of all asbestos (both friable and non-friable). Through contract avenues, the AMCO will keep surveys current. Additionally, new buildings are being constructed that must also be surveyed unless adequate documentation identifies the facility does not contain an ACM. Even when new buildings have documentation stating that no ACBM is present, limited confirmatory sampling will occur.

7.2.2.1. Conduct all asbestos survey work by accredited personnel meeting the “building inspector” training requirements of AHERA and ASHARA and other applicable federal, state and local requirements.

7.2.2.2. Assessments, for each occurrence of asbestos, of the potential for environmental release and of the associated risk to human health and the environment. Notification to facility occupants will include any asbestos related health hazard identified in their work environment.

7.2.2.3. Follow-up periodic surveillance, per AR 200-1, will be performed under a three-year resurvey objective (Environmental Division project number 2-51-93X) by accredited personnel to identify and report damage and deterioration of ACM.

## 8. INSTALLATION ABATEMENT PLAN

**8.1. PURPOSE.** To minimize environmental release and occupational exposure, and as required for maintenance, repair, renovation, and demolition projects, or whenever opportune to do so, the Installation will remove ACM. Immediate corrective action will also occur where a possible asbestos related health hazard has been identified. Appendix E contains a list of common ACMs and those commonly found on the Installation.

**8.2. ABATEMENT PROJECTS.** Work-orders must be submitted for all construction, including self-help projects. Such a policy will eliminate the unknowing or unintentional disturbance of ACM. Work orders must be reviewed to determine whether there is a potential asbestos impact. Before ACM is disturbed, it must be mitigated by certified asbestos abatement workers.

## 9. ASBESTOS MANAGEMENT AND MAINTENANCE PLAN

The Fort Campbell Asbestos Management and Maintenance (AM&M) Plan, dated May 1, 1997, for buildings with ACM, is a set of administrative standard procedures and work practices to be utilized for the in-place management and control of ACM during routine cleaning, maintenance, repairs, renovation and other operational activities (preventive measures and response actions). Design of the AM&M Plan, maintained separately from this plan, is to assist Fort Campbell in complying with regulatory requirements and to minimize asbestos fiber releases from activities that disturb ACM.

The AM&M Plan procedures work with the existing Fort Campbell DPW work order and service order process. The AM&M Plan has been developed on the assumption that all asbestos work, at a minimum, will be done in accordance with applicable regulations by persons trained in asbestos in general, and operations and maintenance methods in particular.

Copies of this plan are located within the DPW Environmental and Maintenance Divisions.

## APPENDIX A

### REFERENCES

*Department of the Army, Department of Defense, and Fort Campbell*

AR 11-34, The Army Respiratory Protection Program, Headquarters, Department of the Army, Washington, DC, 15 February 1990.

AR 40-5, Preventive Medicine, 22 July 2005.

AR 40-66, Medical Record Administration and Health Care Documentation, 20 July 2004.

AR 200-1, Environmental Protection and Enhancement, 21 February 1997.

AR 200-2, Environmental Effects of Army Actions, 23 December 1988.

AR 420-70, Facilities Engineering Building and Structures, 10 October 1997.

U.S. Corps of Engineers, Guide Specification (joint effort with Naval Facilities Engineering Command), UFGS-13280A, “Asbestos Hazard Control Activities,” 1 June 2004.

U.S. Corps of Engineers, Guide Specification (joint effort with Naval Facilities Engineering Command), UFGS-13281N, “Engineering Control of Asbestos Containing Materials,” 1 August 2003.

DOD 4160.21-M, Defense Material Disposition Manual, August 1997.

Fort Campbell, Asbestos Management and Maintenance Plan, 1 May 1997

Fort Campbell, CAM Reg. 40-2, “Medical Services Respiratory Protection Program,” 13 December 1999

Fort Campbell, Certification of Landfill for Asbestos Waste Disposal, 7 January 2004.

Fort Campbell, Environmental Handbook, April 2005 Version, Tab 2

TB MED 502, Occupational and Environmental Health, Respiratory Protection Program, 15 February 1982.

#### A-1

TB MED 513, Occupational and Environmental Health Guidelines for the Evaluation and Control of Asbestos Exposure, 15 December 1986.

### ***State of Kentucky and Tennessee Regulations***

Kentucky, 401 KAR 58:005, Accreditation of asbestos professionals, 7 July 1998.

Kentucky, 401 KAR 58:010, Local education agencies, 24 February 1992.

Kentucky, 401 KAR 58:025, Asbestos NESHAP standards, 4 January 2005.

Kentucky, 401 KAR 58:040, Requirements for asbestos abatement entities, 10 June 1997.

Kentucky, 401 KAR 63:010, Fugitive emissions, 29 June 1979.

Tennessee, 1200-3-8, Fugitive Dust, April 2001.

Tennessee, 1200-3-11-.02, Hazardous Air Contaminants – Asbestos, April 2001.

***U.S. Environmental Protection Agency, Department of Labor, Department of Transportation, and ASTM International***

ASTM E1368-97, Standard Practice for Visual Inspection of Asbestos Abatement Projects, November 1997.

DOT 49 CFR 171, General Information, Regulations and Definitions for Regulations, 3 December 2003.

DOT 49 CFR 172, Hazardous Substances, Use of Hazardous Materials Tables, and Communications, 28 August 2001.

DOT 49 CFR 173, Shippers – General Requirements for Shipments and Packaging, 26 January 2004.

OSHA 29 CFR 1910.1001, Asbestos (General Industry Standard), 9 June 1998

OSHA 29 CFR 1910.134, Respiratory Protection, 23 April 1998.

OSHA 29 CFR 1926.1101, Asbestos (Construction Industry Standard), 29 June 1998.

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USEPA 20T-2003, Managing Asbestos in Place: A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials, July 1990. (Green Book)

USEPA 40 CFR 61 Subpart M, National Emission Standard for Asbestos, 19 June 1995.

USEPA 40 CFR 763, Asbestos, Subpart E – Asbestos-Containing Materials in Schools, 19 June 1995, Subpart G-Asbestos Worker Protection, 15 November 2000, Subpart I-Prohibition of the Manufacture, Importation, Processing, and Distribution in Commerce of Certain Asbestos-Containing Products; Labeling Requirements, 23 June 1993.

USEPA 560/5-85-024, USEPA Guidance for Controlling Asbestos-Containing Materials in Buildings, June 1985. (Purple Book)

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**APPENDIX B**

**FORT CAMPBELL SCHOOL SYSTEM ASBESTOS SURVEY STATUS**  
**AS OF JULY 2005**

Asbestos resurveys of the schools on Fort Campbell are accomplished every three years. The Fort Campbell School System is responsible for ensuring that surveys are accomplished.

<u>Bldg. Numbers</u>	<u>School Name</u>	<u>Survey Status</u>
3708, 3710	Barkley Elementary School	Resurvey 2004
710, 711, 712	Jackson Elementary School	Resurvey 2004
3709, 3711	Lincoln Elementary School	Resurvey 2004
84, 85, 86, 1110, 5440	Marshall Elementary School	Resurvey 2004

2115	Lucas Elementary School	Resurvey 2004
71	Mahaffey Middle School	Resurvey 2004
175, 176	Wassom Middle School	Resurvey 2004
902, 903, 904, 5380	Fort Campbell High School	Resurvey 2004

Baker Environmental, Inc. prepared the 2004 triennial AHERA inspection reports. Copies of the inspection reports are kept at the school and at the Fort Campbell School District Office.

## B-1 APPENDIX C

### KENTUCKY AND TENNESSEE NESHAP REPORTING REQUIREMENTS

The State of Kentucky and Tennessee have NESHAP Reporting Requirements for Asbestos Abatement and for Demolition (Defined as the demolition of a building or demolition of a load supporting structure such as a load-bearing wall).

#### **Demolitions Only (no Asbestos Abatement):**

In the case of demolition (including deconstruction) only, the contractor or In-House entity will mail and be postmarked, fax and follow-up with a mailing, or deliver the NESHAP notice 10 working days before demolition begins even if the operation involves removal of “non-regulated” ACM only in any amount, OR even if the operation involves no ACM removal whatsoever!

#### **Demolitions in conjunction with Abatement:**

In the case of demolition (including deconstruction) where asbestos abatement is also involved, the contractor or In-House entity will send in a separate notice for the abatement as required in paragraphs 1. through 4. below. The abatement notice may also

be included on the demolition notice, so that only one notice may be sent (providing that there is not a break between abatement and demolition). In this case, include the additional notice information as identified in paragraphs 1. through 4.

1. The Contractor or In-House Asbestos Abatement Team is requested by the state to telephone at least 24 hours beforehand if the operation involves RACM that is below 260 LF, 160 SF, or 35 CF. This only applies to the contractor if the contractor has sent a long-term NESHAP notification to the State. (The Post sends in a long-term NESHAP notification to both Kentucky and Tennessee each December to cover the calendar year.)

2. The Contractor will mail and be postmarked, fax and follow-up with a mailing, or deliver the NESHAP notice 10 working days beforehand if the operation involves RACM that is below 260 LF, 160 SF, or 35 CF (and if the contractor has not sent a long-term NESHAP notification to the State). (The Post sends in a long-term NESHAP notification to both Kentucky and Tennessee each December to cover the calendar year.)

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3. The Contractor or In-House entity is requested (not a regulatory requirement) by the State to mail, fax, deliver a notice, or phone in the notice so that it is received at least 24 hours beforehand if the operation involves only non-regulated ACM in any amount. (The government “project designer” may still specify that the contractor do a NESHAP notice for any asbestos removal actions. This would be advantages to the government.)

4. The Contractor or In-House entity will mail and be postmarked, fax and follow-up with a mailing, or deliver the NESHAP notice at least 10 working days before abatement begins if the operation involves RACM that is at least 260 LF, 160 SF, or 35 CF.

#### **Abatement Only (no Demolition):**

The Contractor or In-House Asbestos Abatement Team is requested by the state to telephone at least 24 hours beforehand if the operation involves RACM that is below 260 LF, 160 SF, or 35 CF. This only applies to the contractor if the contractor has sent a long-term NESHAP notification to the State. (The Post sends in a long-term NESHAP notification to both Kentucky and Tennessee each December to cover the calendar year.)

The Contractor will mail and be postmarked, fax and follow-up with a mailing, or deliver the NESHAP notice 10 working days beforehand if the operation involves RACM that is below 260 LF, 160 SF, or 35 CF (and if the contractor has not sent a long-term NESHAP notification to the State). (The Post sends in a long-term NESHAP notification to both Kentucky and Tennessee each December to cover the calendar year.)

The Contractor or In-House entity is requested (not a regulatory requirement) by the State to mail, fax, deliver a notice, or phone in the notice so that it is received at least 24 hours beforehand if the operation involves only non-regulated ACM in any amount. (The government “project designer” may still specify that the contractor do a NESHAP notice for any asbestos removal actions. This would be advantages to the government.)

The Contractor or In-House entity will mail and be postmarked, fax and follow-up with a mailing, or deliver the NESHAP notice at least 10 working days before abatement begins if the operation involves RACM that is at least 260 LF, 160 SF, or 35 CF.

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### **Notification Addresses / Phone Numbers:**

Notifications for work in Kentucky are sent to:

Betsy Calhoun  
Kentucky Division for Air Quality  
Asbestos Branch, Paducah Region  
4500 Clarks River Road  
Paducah, Kentucky 42003  
(502) 898-8468 Office  
(502) 898-8640 Fax

Notifications for work in Tennessee are sent to:

Mr. Randal Harrison  
Tennessee Division Air Pollution Control  
9th Floor, L & C Annex, 401 Church St.  
Nashville, Tennessee 37219-5403  
(615) 532-0554 Office  
(615) 532-0614 Fax

## APPENDIX E

### SAMPLE LIST OF SUSPECT ASBESTOS CONTAINING MATERIALS (COMMON ACMs ON FORT CAMPBELL HIGHLIGHTED)

#### CONSTRUCTION MISC.

Adhesives  
Base Flashing  
Caulking/Putties  
Ceiling Mastics  
Ceiling Tiles and Lay-in Panels  
Acoustical Plaster  
Decorative Plaster  
Textured Paints/Coatings  
Blown-in Insulation  
Spray-Applied Insulation  
Cement Siding  
Chalkboards  
Taping Compounds (thermal)  
Thermal Paper Products

#### HVAC

Cooling Towers (Transite Panels)  
**Duct Flexible Fabric Connections**  
Heating Ducts  
HVAC Duct Insulation  
**HVAC Mastic**

#### FLOORING

**Asphalt Floor Tile**  
Carpet Mastic  
**Vinyl Floor Tile**  
**Vinyl Sheet Flooring**  
**Flooring Backing / Mastic**  
Packing Materials (for wall/ floor penetrations)

#### LABORATORIES

Laboratory Hoods / Table Tops  
Laboratory Gloves

#### PIPING

**Cement (Transite) Pipes**  
Pipe Insulation (Underground)  
**Pipe Insulation (In Buildings)**  
**Pipe Joint Insulation**

#### ROOFING

**Heat Shield (Penetrations)**  
**Roofing Felt / Roofing Tar**

## **ELECTRICAL**

Electrical Cloth  
Electrical Ducts  
Electrical Panel Partitions  
Electrical Wiring Insulation

## **ELEVATORS**

Elevator Brake Shoes  
Elevator Equipment Panels

## **FIREPROOFING**

Fire Blankets  
Fire Curtains  
**Fire Doors**

## **Roof Flashing Tar**

Roofing Shingles

## **TANKS (MECH. ROOM)**

Breaching Insulation  
**Boiler / Tank Insulation**  
**High Temperature Gaskets**

## **WALLS**

**Cement Wallboard**  
**Joint Compounds (Drywall)**  
Spackling Compounds  
Vinyl Wall Coverings